

Data Mining and Its Security

Pros

1. Provides info. based on previous purchases to project those who will respond to the novel advertising operations like direct mail, online marketing, among others. (Sellers can vend lucrative merchandise to targeted consumers). Retailers collect vast volumes of data through years and predict the product sales trends, habits of customer purchase and their preferences.
2. Provides relevant statistics about loans and reporting of credit. This will help banks to identify fake credit card dealings and safeguard credit card owners.
3. Provides analytics to improve health care and reduce costs, guarantee patients get proper care at the correct time and appropriate place, processes are developed with supporting evidence.
4. Provides business/market owner to scope customers' purchasing behaviour.
5. Provides discerning information from the available facts in the learning setting and can help to predict students' future learning behaviour.
6. Provides discerning the arrays in the multifaceted manufacturing process. Can be used to generate the relationship between product design, product assortment, and consumer necessities.
7. Provides campaigns to understand their product and service consumers. Also, the relationship between the retailers and customers in built, and customers retained through customer relationship management.
8. Provides ease on the process of fraud recognition from being cumbersome and time-consuming.
9. Provides averting intrusion including user verification, circumventing programming blunders, and information fortification.
10. Provides the law enforcers to identify criminal suspects, and customize data excavating skills to probe crimes, observe communication among the suspects.
11. Provides help to segment customers in the preference of their needs.
12. Provides analyzing financial transactions as to pick out patterns on money laundering. Help business owners to use information to modify their products as per the consumer's desires.
13. Provides researchers to accelerate the process of analyzing the data, cleaning data, pre-processing, and integration of databases.
14. Provides extracting useful knowledge from massive bioinformatics databases and other associated life-science areas.
15. Provides all sorts of information regarding the response of a consumer and in defining consumer groups.
16. Provides evidence about selling promoted products online and ultimately reduce the charges of the product and its services.

Cons

1. Requires advance skilled specialists since they are the only person who is able to understand the different arrays and associations whose pattern connotation and the user must make valid.
2. Often infringes on the confidentiality of the user and it puts at risk the user's secretive information which is very critical nowadays.

3. Lack sufficient security systems to protect enormous amount of information about people online that most companies collected through their emails and google search. Which will open a window for hackers.
4. Some data based on previous purchase on big consumers like companies could cause enterprises to be used against others.
5. During the data collection, a lot of irrelevant information may be obtained and this will cause overwhelming and time-consuming for the amount of data.
6. The technology and tools required in data mining and result interpretation consume many resources and this will be a great cost at the implementation stage.
7. Perfection of the data mining process is yet to be developed and this will cause possible inaccuracy of data and bad outcome from the decision-making process.